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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,187	03/03/2004	Valery A. Petrenko	035721/274140	4902
826	7590 04/28/2005		EXAMINER	
ALSTON &	BIRD LLP	YU, MELANIE J		
BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000			ART UNIT	PAPER NUMBER
	E, NC 28280-4000	1641		
			DATE MAILED: 04/28/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/792,187	PETRENKO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Melanie Yu	1641				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 11 April 2005.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) 1,2 and 4-20 is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 3 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
<ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☑ The drawing(s) filed on 03 March 2004 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  Paper No(s)/Mail Date						

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#### **DETAILED ACTION**

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### Election/Restrictions

1. Applicant's election of group III, claim 3, in the reply filed on 11 April 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 1, 2 and 4-20 are withdrawn from consideration as being drawn to non-elected inventions.

# Claim Objections

2. Claim 3 is objected to because of the following informalities: the claim depends from non-elected claim 1. Appropriate correction is required.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is vague and indefinite because it is a product that is made by a specific process. It is unclear what product limitations result from the process recited in withdrawn claim 1. The only product limitation required for the current product is a monolayer because no other specific product limitations have been recited as essential to the product. For instance, it is unclear what product limitations result from delivering a composition at a specific rate.

Furthermore, it is unclear what composition results from a stripped phage. It is unclear if the

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monolayer must comprise a stripped phage, and what other product requirements are encompassed by the monolayer recited in claim 3.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Hengerer et al. 4. (Quartz crystal microbalance as a device for the screening of phage libraries, 1999, Biosensors & Bioelectronics, Vol. 14, pgs. 139-144).

Hengerer et al. teach a monolayer (pg. 140, section 2.2).

5. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Benjamin et al. (US 2001/0006778).

Benjamin et al. teach a cell monolayer (par. 0058).

6. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Uttenthaler et al. (Quartz crystal biosensor for detection of the African Swine Fever disease, 1998, Analytica Chimica Acta, Vol. 362, pages 91-100).

Uttenthaler et al. teach a layer of VP73 receptors (Fig. 1; pg. 95, section 3.1, first paragraph), which encompasses a monolayer.

Although Hengerer et al., Benjamin et al. and Uttenthaler et al. do not specifically teach the method of forming recited in withdrawn claim 1, both teach a monolayer as disclosed above. It is unclear what further product limitations would be provided by the recited method and

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therefore, Hengerer et al., Benjamin et al. and Uttenthaler et al. teach the product recited in claim 3.

## **Double Patenting**

- 7. Claim 3 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of copending Application No. 09/452,968. Although the conflicting claims are not identical, they are not patentably distinct from each other because the monolayer of claim 18 is encompassed by any monolayer as recited in claim 3 of the instant application.
- 8. Claim 3 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 20 of copending Application No. 10/068,570. Although the conflicting claims are not identical, they are not patentably distinct from each other because a layer comprising a peptide is encompassed by a monolayer as recited in claim 3 of the instant application.
- 9. Claim 3 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application No. 10/289,725. Although the conflicting claims are not identical, they are not patentably distinct from each other because a layer of biotinylated lipid is encompassed by a monolayer as recited by instant claim 3.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Yu whose telephone number is (571) 272-2933. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Molanie Yu
Patent Examiner
Art Unit 1641

LONG V. LE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600

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